

# **EXHIBIT A**

BATTERY TERMINAL CONNECTING CABLE

CROSS REFERENCE TO RELATED APPLICATIONS

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Applicants claim priority under 35 U.S.C. §119 of  
GERMAN Application No. 198 34 792.8 filed AUGUST 1, 1998 and  
GERMAN Application No. 199 06 088.6 filed February 13, 1999.  
Applicants also claim priority under 35 U.S.C. §120 of  
PCT/DE99/02323 filed on JULY 30, 1999. The international  
application under PCT article 21 (2) was not published in  
English.

The invention relates to a battery terminal connecting cable  
with a strand consisting of numerous fine wires and a further  
section having a hole for a screw, whereby on the further section  
the numerous fine wires are welded together, a method for the  
manufacture of a battery terminal connecting cable and a device  
for the manufacture of such a cable.

Battery terminal connecting cables are used primarily to  
interconnect battery cells conductively. In this case one also  
talks of cell connectors. For the conduction of relatively high  
currents at low electrical resistance the strand usually consists  
of copper wires twisted into a strand having a cross-section of  
approximately 50 mm<sup>2</sup>. Depending on the field of application,  
however, both thicker and thinner strands are used.

In order to connect such a strand consisting of numerous  
fine copper wires to a battery terminal, a copper pipe section is  
first inverted over the strand and this pipe section is then  
pressed to an approximate plate shape. In this plate there is a  
hole which first passes through the upper side of the original  
pipe section, then through the compressed cable and finally

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through the lower side of the original pipe section. Finally in this hole there is inserted a screw which interacts with a thread in the battery terminal so that when the screw is tightened, the strand held together by means of the copper sleeving is pressed onto the battery terminal.

In practice it has been found that even a relatively strongly tightened screw works loose as a result of vibrations, as occur especially in batteries located in vehicles. This has the result that the end of the cable is no longer securely connected to the battery terminal. Contact is therefore made over smaller areas and is thus

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